FOR A

LIFETIME

OF

SERVICE

ELECTRIC SEWING MACHINE

# ELECTRIC SEWING MACHINE



NATIONALLY DISTRIBUTED AND SERVICED BY
AUTHORIZED SEWING MACHINE DEALERS EVERYWHERE

## ELECTRIC SEWING MACHINE



\$189.50 FULL CASH PRICE

#### TO THE OWNER:

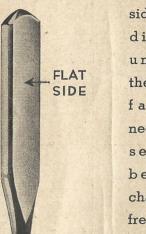
When you invested in this SEWING MACHINE, you acquired one of the finest full size machines obtainable for your sewing needs. This was precision-built for a lifetime of service, having parts interchangeable with those of other first class manufacturers. It requires a minimum amount of servicing and will give the maximum in satisfaction. If desired, this may be installed in a console or desk.

This manual provides all the information needed to properly care for and operate your SEWING MACHINE. You are therefore urged to refer to it often. Read the simple directions thoroughly and follow them closely, in order that you may familiarize yourself with the machine and obtain the fullest enjoyment from its use.

Several service calls may be necessary to adjust your SEWING MACHINE to your individual needs, and to eliminate any stiffness which may be present in a newly purchased machine. So, please do not hesitate to call on your Authorized Dealer for any adjustments that you may feel are required during the initial break-in period.

(See Fig. 1)

Raise the needle bar to its highest point by turning the disc wheel toward you by hand. Loosen the needle clamp screw (A) on the right hand side, and the needle clamp will open itself. Remove the old needle, and slide new needle up (flat



side toward the disc wheel) until it hits the stop, then fasten the needle clamp securely. For best results, change needles frequently.

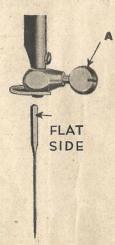


Fig. 1

#### NEEDLES AND THREAD:

When buying needles for this machine, be sure to follow the guide on page 4 of this booklet.

Never attempt to use a bent needle, nor one with a blunt point.

The size of the needle should conform to the size of the thread, and both should be suitable to the material. Use a needle sufficiently large to permit the thread to pass freely through the eye. In general sewing, use the same size thread in the bobbin as is used on top.

## NEEDLE AND THREAD SIZES USE 15 × 1 NEEDLE ONLY

Sizes & Grades	Type of Fabric and	SIZE OF THREAD		EAD ·
of Needles	Work to be Done	Cotton	Silk	Linen
(Medium-	Medium light-weight and summertime fabrics. For house dresses, children's dresses, washable cotton dresses, aprons curtains.	80 to	O Twist	
½ or 14 (Medium)	Dress silks and cottons, light weight woolens, draperies, fabric furnishings.  For general household sewing, fine men's shirts, smocks, window draperies and fabric decorations.	60 to 80	A & B Twist	
I or 16 (Light- Heavy)	Heavy cretonne, madras, muslin, brocades and quilts. For men's work shirts, sturdy smocks and aprons, heavy quilting and fabric furnishings.	40 to 60	C Twist	
2 or 18 (Medium- Heavy)	Heavy woven coating, light weight canvas, bed ticking, upholstery and awning materials, slip-cover fabrics. For work or sports uniforms, suits made of strong linen or cotton fabrics, awnings, slip covers and mattresses.	30 to 40	D Twist	
3 or 19 (Heavy)	Heavy woven suiting, coating, duck, ticking, drilling, canvas and sacking.  For heavy wash uniforms, bedding supplies for hospitals, hotels and camps.	10 to 30	E Twist	60 to 80
4 or 21 (Extra- Heavy)	For bags, canvas, coarse cloths and heavy goods.	Very Coarse	h \$40 MO \$	40 to 60

#### WINDING THE BOBBIN:

(See Fig. 2)



Fig 2

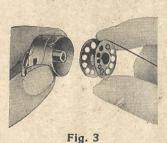
Loosen the balance wheel by turning the stop-motion knob toward you (Fig. 7) and place a spool of thread on the spool pin (A). Pass the end of the thread through the notch on front upper left corner of machine (B), and through the disk at the bottom right of the machine from below (C). Then wind the bobbin seven or eight times with the free end of the thread, and put the threaded bobbin on the spindle of the bobbin winder (D).

Press the bobbin on the spindle with the left hand, and make sure that it is pressed to the end of the spindle, until the slot in the bobbin fits into the pin on the spindle. Exert a little pressure between the bobbin and the rubber wheel until the latter presses right against the hub of the balance wheel, and the clasp (E) retains the winder in position. Turn the balance wheel toward you by hand, and proceed to operate the rheostat control, as in sewing, until bobbin is almost full. Then break off the thread, and detach the bobbin form the spindle.

Should the thread not wind evenly on the bobbin, loosen the screw (F) which holds the tension bracket in position on the bed of the machine, and slide the tension bracket to the right or left, as desired, then tighten the screw.

#### THREADING THE BOBBIN CASE:

Hold the bobbin between the thumb and forefinger of your right hand, and pull out a length of 3 or 4 inches of thread (Fig. 3). Hold the bobbin case in your left hand, (the slot in the edge being at the top), and, when bobbin in inside, open the hinged latch on the front of the bobbin case. This prevents bobbin from dropping out while handling. With the right hand



guide the thread into the slot, by pulling it to the left, then pull the thread to the right under the tension spring and into its delivery eye (Fig. 4).



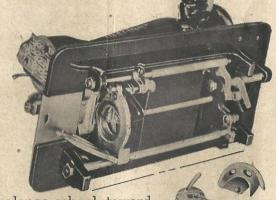
Fig. 4

#### INSERTING THE BOBBIN CASE:

(See Fig. 5)

Hold the bobbin case by the latch (A) after you have inserted the bobbin, and place it so that the center pin of the bobbin case holder fits into the hub of the bobbin case. In inserting the bobbin case, the eye hole must be on top, with the projecting finger falling into its groove.

Press the bobbin case gently into the bobbin case holder, releasing the latch at the same time, until the stud of the bobbin case holder catches onto the latch. There should be at least 3 or 4 inches of thread hanging freely from the bobbin case. Then, holding the needle thread with



your left hand, turn the balance wheel toward you, and bring up the bobbin thread through the stitch hole of the needle plate.

Fig. 5

#### THREADING THE MACHINE:

(See Fig. 6)

Turn the balance wheel by hand towards you until the take-up lever (A) is at its highest point. Place a spool of thread on the spool pin on the top right of the machine: pass the thread through the notch (B) on the back left of the machine: down between the tension disks (C) from the back; up over the tension thread quard (D) from behind: down into the hook of the take-up spring (E) up and through the hole in the end of the take-up lever (A) from the back; down through the eyelet (F) in the front of the face plate, and into the wire thread guide (G) at the lower end of the needle bar; then from left to right through the eye of the needle (H). Draw about 4 inches of thread through the eye of the needle with which to commence sewing.

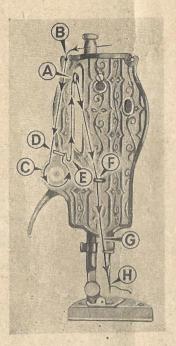


Fig. 6

#### THE BALANCE WHEEL:

(See Fig. 7)

The balance wheel should always turn toward you. It is provided with a stopmotion device which allows the balance wheel to run freely, so that bobbins may be wound without operating the needle.

To loosen the wheel, hold it tightly with the left hand, and, with the right hand, turn the stop-motion knob over toward you. (See arrow in Fig. 7).

To tighten the balance wheel, turn stopmotion knob away from you.



Fig. 7

## 20 Pear Guarantee Bond

This is to certify that the SEWING MACHINE listed on Slip Number
dated is hereby guaranteed for twenty years for family sewing. Only the
best materials and the most skilled labor enters into the construction of this machine. Any
part found defective and returned, (transportation charges prepaid), within twenty years
from date shown above, will be replaced, free of charge by the authorized SEWING
MACHINE Dealer named below, or affiliated branches.

The motor is guaranteed for one year. Any motor proving defective will be replaced, free of charge, if returned, (transportation charges prepaid), within one year of the date shown above.

This guarantee is binding on all parts of the machine, except bobbin case, bobbins, needles, bulbs, cords and rheostats.

AUTHORIZED SEWING MACHINE DEALER

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#### PREPARING TO SEW:

(See Fig. 8)

A. Thread machine.

B. Pick up bobbin thread as follows:

Turn the balance wheel toward you by hand, until the needle moves down, and up again to its highest point, thus catching the bobbin thread. If the bobbin thread does not rise, check to see if at least 3 or 4 inches of bobbin thread is hanging loosely from the bobbin case. Pull the needle thread gently, and the bobbin thread will come up with it through the needle hole.



Fig. 8

Draw both the needle thread and the bobbin thread back, through the fingers of the presser foot (Fig. 9), and commence sewing.

#### TO COMMENCE SEWING:

With the needle raised and the threads drawn back, at least 4 inches through the fingers of the presser foot, place the material to be sewn beneath the presser foot, and lower presser foot lever. Insert needle into material, by turning the balance wheel toward you, from top down, by hand. Regulate stitch to desired size (Fig. 10), and commence sewing.

Do not try to help the feeding of the work by pulling the material, as this may bend the needle and cause it to blunt or break. As the machine feeds without any assistance, it is sufficient merely to guide the fabric in the direction you want it to be sewn.

#### TO REMOVE THE WORK:

To remove the work, stop the machine with the needle at its highest point; raise the presser foot, and draw the fabric back and to the left, then pass the threads over the thread cutter, and pull down lightly to sever them.



Fig. 9

#### NOTE:

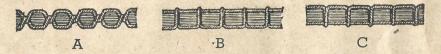
While the SEWING MACHINE is new, always start sewing with the needle in the downward stroke, inserted in the material.

#### REGULATING THE STITCH:

For ordinary stitching, the tension on the upper and under threads should be equal, and just sufficiently strong to lock both threads in the center of the work, as shown below (A).

If the tension on the needle thread is too tight, or if that on the bobbin thread is too loose, the needle thread will lie straight along the upper surface of the material, thus making an imperfect stitch, as shown below (B).

If the tension of the bobbin thread is too tight, or if that on the needle thread is too loose, the bobbin thread will lie straight along the under side of the material, thus making an imperfect stitch, as shown below (C).



#### REGULATING THE TENSION:

A correct stitch can usually be obtained by varying the tension on the needle thread.

To increase the tension, turn the thumb nut on tension spring (Fig. 2, [1]) clockwise; to lessen the tension turn the nut in the opposite direction. The thumb nut should not be turned abruptly, but regulated little by little, until the desired tension is obtained. All adjustments should be made while the presser foot is down, since an automatic release does not permit adjustments to be made while the presser fool is up.

All sewing machines are correctly adjusted before leaving the factory, and it is therefore seldom neccesary to alter the bobbin tension. Should it become necessary to do so, however, due to using certain kinds of materials, the adjusting screw, in the tension spring on the outside of the bobbin case, can be tightened so as to increase the tension, or loosened slightly in order to lessen the tension.

The grade of sewing depends on the thread tension, so that it is necessary for the user to become fully familiar with the correct tensions, through practice.

# TO REGULATE LENGTH OF STITCH AND DIRECTION OF FEED:

(See Fig. 10)

The direction of the feed, and the length of stitch, are regulated by the lever, projecting to the left of the automatic bobbin winder. The exact center of the slot, in which the lever is set, is the neutral position. Sewing in this position will cause your machine to lock. By moving the lever up or down away from the center of the slot, your machine will sew, either forward or backward, depending upon its position. The size of the stitch, and number of stitches to the inch, depends upon the distance that you set the lever from the center of the slot. The length of the stitch increases as you move the lever away from the center of the slot. Reverse stitch is used for tieing or tacking seams.



Fig. 10

#### TO OIL THE MACHINE:

(See Fig. 11)

This SEWING MACHINE never needs grease. All moving parts, which come in contact with others, must be covered with a film of oil, and should not be allowed to become dry. Oil, when necessary, should be applied at the points indicated by the arrows in Fig. 11, a drop of oil being sufficient at any place. To oil the needle bar mechanism, remove the face plate by loosening the screw, shown by the arrow at the extreme left of the illustration, and slipping the plate over it. Oil should be applied freely at all contact points on the underside of the machine. A few drops of oil in the bobbin race will allow your machine to run freely.

When oiling, insert the oil can nozzle well into the oil holes. After oiling, run the machine rapidly for a few minutes, so that the oil may penetrate into the bearings. For the proper care of your machine, oil frequently. Neglect to do this tends to shorten the life of the machine, and may cause trouble and annoyance.

One drop of oil in the motor bearings every six months is sufficient to enable your motor to last many years. Oil holes are located at either end.



Fig. 11

### IMPORTANT NOTICE

NEVER OPERATE THE MACHINE WITHOUT FABRIC UNDER THE PRESSER FOOT. IF THIS IS NOT STRICTLY ADHERED TO, YOUR MACHINE WILL LOCK, AND CANNOT BE OPERATED UNTIL THE THREAD IS CLEANED OUT

OF THE RACE. A common fault of seamstresses is to allow the machine to run off the cloth as they are completing seams. If this should be necessary, be certain to exert guiding pressure on the threads by pulling the cloth back away from the needle after the cloth has passed the presser foot, and permitting the loose threads to remain above the needle plate.

#### **OPERATING HINTS:**

**SKIPPED STITCHES.** May be caused by a bent or blunt needle; or by incorrect setting of the needle; or the wrong size needle; or by a thread too heavy for the size of the needle.

SEE THAT THE PRESSER FOOT is securely clamped by the screw and snug against the presser bar, so that the needle may pass through the opening in the foot without any interference.

BREAKING NEEDLES. Usually due to pulling on the work, causing the needle to get out of line and strike the throat plate, thus breaking or bending the needle. May be due to presser foot or attachments not being securely fastened to presser bar. Be sure to use correct size needle and thread for material. See page 4.

#### BREAKING THE UPPER THREAD. May be caused by:

- (1) Incorrect threading.
- (2) Not bringing up under thread correctly.
- (3) Upper tension too tight.
- (4) Needle imperfect, or set incorrectly.
- (5) Needle rubbing against attachments or presser foot.
- (6) Needle eye too small for thread.
- (7) Starting the machine at full speed.
- (8) Starting without take-up lever at highest point.

#### BREAKING THE LOWER THREAD. May be caused by:

- (1) Incorrect threading of bobbin case.
- (2) Too tight a tension.
- (3) Bobbin wound too full revolve freely.
- (4) Not bringing up under thread correctly.
- (5) Hole in the needle plate rough caused by needle striking the plate.
- (6) Dust or lint in bobbin.

#### UNEVEN STITCHES. May be caused by:

- (1) Presser foot not resting evenly on material.
- (2) Feed not high enough.
- (3) Too short a stitch.
- (4) Pulling the cloth.
- (5) Too fine a needle with too coarse or poor a thread.